

Amendment to the Specification:

Please amend the following paragraphs:

[0030] Fig. 1 shows a plate shaped element 1 for a laminated stack forming a sheet for an actuator. The element 1 comprises ~~consists of~~ a body 2 of an elastomeric material. The body 2 has a corrugated surface having a corrugated profile on one of its two surfaces, and an electrode 3 deposited on a large part of the corrugated surface. The electrode is deposited onto the surface of the body in a thickness of a few hundreds of Angstroms e.g. by vapour deposition of conductive particles onto the surface. The electrode could be made from gold, silver, ~~[[and]]~~ or copper or from any other conductive material.

[0031] The corrugations of the body 2 are not shown in Fig. 1 but they should be understood to be corrugations, e.g. with a quasi-sinusoidal or a curved cross-sectional shape e.g. with a corrugation height from the top of a corrugation to the bottom of the corrugation in the order of 1/3-1/5 of the total thickness of the elastomer body. As an example, the corrugation height of a body having a total thickness of 20 μm could be in the size of 5 μm . With respect to the orientation of the body 2 and electrode 3 of Fig. 1, the corrugations extend in a horizontal direction, i.e. in the direction indicated by the arrow, cf. numeral 8. The body 2 including the corrugations is made e.g. in a moulding process from a silicone or rubber material or from any other elastomer.

[0035] Fig. 3 shows a side view of an actuator 9 in the form of a structure laminated from elements comprising bodies made from an elastomeric material 2 and an electrode 3. In order to visualise the structure more clearly, the thicknesses of the bodies and the electrodes are shown without considering right proportions. In reality, the electrodes may be vaporised on the elastomeric body 2, whereby the total thickness of a single elements 1, 7 is limited to around 15-30 mm, of which the electrode has a thickness of a few hundreds of Angstroms. Accordingly, the laminated actuator 9 forms a flat sheet structure. In the

laminated structure of the actuator 9, elements of the first type 1 ~~[[is]]~~ are arranged adjacent and alternating elements of the second type 7, thereby forming two conductive connection paths extending along the peripheral rim portion of the actuator for connecting an electrical source for establishing an electrical potential difference between electrodes of adjacent elements in the actuator.

[0037] The force developed by the actuator increases with the number of elements in the laminated structure. A sealing sheet 12, ~~consisting of~~ comprising a body of the same elastomer as the first and second element, is closing the laminated structure, whereby the electrode of the last element is sealed and electrically insulated from the surroundings. ~~[[A]]~~ The sealing sheet 12 is arranged in contact with an electrode of ~~[[an]]~~ the adjacent element.

[0040] In further details, the following applies for a rolled sheet with a circular cross sectional shape:

$$\text{Perimeter} = 2 \times \pi \times r$$

$$\text{Area} = \pi \times r^2$$

$$\text{Volume} = \text{Area} \times \text{length}$$

wherein r denotes the radial dimension of the roll. Since the length is changed, and the Volume is fixed, the area has to be changed. The area can only change as a result of changes to the radius which, in theory, is not possible and, in practise, very difficult due to the perimeter conservation. On the contrary, the following applies for a rolled sheet with an elliptical, i.e. a non-circular cross sectional shape:

$$\text{Perimeter} = 2 \times \pi \times \sqrt{\frac{a^2 + b^2}{2}}$$

$$\text{Area} = \pi \times a \times b$$

$$\text{Volume} = \text{Area} \times \text{length}$$

wherein a and b ~~represents~~ represent the half the lengths of the two axes of symmetry in the ellipse. Accordingly, it is easier to extend and shorten the rolled actuator having an elliptical cross-sectional shape since it is possible to find

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different value sets of a and b where each set results in a constant perimeter value while the area changes.